Alberta Cancer Board

EPIDEMIOLOGY, PREVENTION AND SCREENING

Screen Test: Alberta Program for the Early Detection of Breast Cancer

1999/01 Biennial Report

March 2002

Celebrating 10 Years

Screen Test
Alberta Program for the Early Detection of Breast Cancer

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Division of Epidemiology, Prevention and Screening
Alberta Cancer Board

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About the Alberta Cancer Board

Facilities and Services

The Alberta Cancer Board is a Provincial Health Authority operating cancer facilities and programs in Alberta. Services include cancer prevention, early detection, diagnosis, treatment, research and education. Also included in this role is coordinating in cooperation with others, the planning, development and delivery of provincial cancer initiatives.

As part of this mandate the Alberta Cancer Board operates:

Cancer treatment and research facilities
Cross Cancer Institute in Edmonton and Tom Baker Cancer Centre in Calgary

Associate Cancer Centres
Grande Prairie, Lethbridge, Red Deer and Medicine Hat

Community Cancer Centres (in partnership with RHAs)
Headwaters RHA 3 in High River, RHA 5 in Drumheller, East Central RHA 7 in Camrose, WestView RHA 8 in Hinton, Aspen RHA 11 in Barrhead, Lakeland RHA 12 in Bonnyville, Peace RHA 14 in Peace River and Northern Lights RHA 16 in Fort McMurray

Division of Epidemiology, Prevention and Screening

Population health research: conducts research into population-based trends in cancer incidence, morbidity and mortality, the causes of cancer, prevention strategies and the early detection of cancer.

Alberta Cancer Registry: a population-based registry of cancer cases in the province.

***Screen Test:* Alberta Program for the Early Detection of Breast Cancer**: a screening mammography and breast health education program with fixed-site offices in Calgary and Edmonton and mobile mammography services throughout the province.

Alberta Cervical Cancer Screening Program: coordinates education strategies and materials; increases efforts to encourage participation of women who have not been regularly screened; and fosters quality at all stages of the screening process.

Cancer prevention outreach: provides a variety of services to RHAs, including cancer information, assistance with program and policy development and linkages to resources.

The Alberta Coordinating Council for Cancer Control

The Alberta Cancer Board participates in the Alberta Coordinating Council for Cancer Control to connect cancer control efforts around the province and bring cancer services closer to home. The Cancer Coordinating Council extends the Alberta Cancer Board's expertise in cancer control programs (including prevention, screening, diagnosis, treatment, supportive and palliative care), cancer epidemiology and cancer research to urban and rural communities through collaboration with Regional Health Authorities and others.

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Executive Summary

Screen Test: Alberta Program for the Early Detection of Breast Cancer is now entering its 12th year of operation and continues to evaluate its services to Alberta women, guided by Canadian recommendations for organized breast cancer screening programs as well as the goals of the Program. Although the Program is not yet fully implemented province-wide, valuable information and data have been collected, analyzed and utilized. Detailed data and activities are presented in this report. The following are Program highlights of activities and results from the 1999/01 fiscal years.

- *Screen Test* provided screening services to over 22,000 women in each of the last two years.
- 77% of the women screened were 50-69 years of age and services were provided at over 100 mobile mammography sites among 17 Regional Health Authorities.
- 8% of women attending for an initial screening and 4% of women attending for subsequent screening were referred for followup, providing an overall abnormality rate of 5%. This met international standards of less than 10% for first visits and less than 7% for subsequent visits.
- The cancer detection rate was 5.4 per 1000 overall, 8.2 per 1000 for prevalent and 4.9 per 1000 for incident screens. This exceeded international standards of 5 per 1000 or greater for prevalent screens and 2 per 1000 or greater for incident screens.
- Community mobilization continued to focus on recruiting hard to reach groups, promotion of early detection practices and working directly with women in the community and other interested groups.
- Although there is not yet a fully implemented Program in Alberta, the Alberta Cancer Board's *Screen Test* Program continued to provide for the women of Alberta a high quality, cost effective screening program designed to interrupt the disease process of breast cancer at the earliest possible stage.

Screen Test is celebrating 10 years of service to Alberta women!

Message from the Director

It is my sincere pleasure to introduce the 1999/01 Biennial Report of *Screen Test: Alberta Program for the Early Detection of Breast Cancer*. The report presents data and activity highlights, demonstrating the achievements of programmatic screening.

In today's current health environment, there is an increasing awareness that we need to have outcome information in order to evaluate what we are really accomplishing on behalf of Albertans. *Screen Test* has been built on the principles of outcome analysis and continuous quality improvement based on the outcomes we find. This report is a demonstration of this principle.

In order to see reductions in breast cancer deaths, we need to be sure that we reach the target population, that we provide high quality service, that we detect the expected number of cancers, and that we do this without causing unnecessary rates of referral for diagnostic visits. This report indicates how the cancer detection rates and diagnostic rates meet with international standards. It also shows our efforts in working with various communities to ensure that all women who could benefit from screening are able to avail themselves of the services.

As *Screen Test* enters its twelfth year, the Program continues to provide services of outstanding quality to women in Alberta, expanded over these last few years to reach even more areas of the province thanks to the collaborative efforts of *Screen Test*, the Regional Health Authorities and health care providers in program delivery. It is our privilege to continue to serve the women of Alberta in our combined efforts to reduce breast cancer deaths in our province.

Heather Bryant, MD, PhD, CCFP, FRCPC
Director, Division of Epidemiology, Prevention and Screening

Message from the Chief Radiologist

Three new radiologists joined *Screen Test* as readers in 1999, and we were pleased to sustain the Program's high cancer detection rate, low recall rate and a high positive predictive value for screening, that had developed since *Screen Test* began in 1990. All of the Program's mammography units remain accredited with the Mammography Accreditation Program of the Canadian Association of Radiologists. As the accreditation process runs for a three-year term, together with annual updates for each unit, this requires a significant time commitment and attention to detail from Gloria Marcynuk, *Screen Test's* Quality Assurance Coordinator. I would like to thank Gloria and all the *Screen Test* technologists for their outstanding efforts.

Most of the technologists have obtained the Canadian Association of Radiation Technologists Breast Imaging Certificate. They continue to perform regular assessment of their work with peer reviewed technologist audits, and many attend the monthly Quality Assurance Committee meetings.

The tenth anniversary of *Screen Test* occurred in October 2000, and we were delighted that The Honourable Lois E. Hole, Lieutenant Governor of Alberta, was able to grace us with her presence at the celebrations held in Calgary and Edmonton.

Screen Test continues to send out reminder letters to previous attendees when their next mammogram is due. I am disappointed there is still no provincial mammography database for all eligible Alberta women. This would greatly aid in screening recruitment. However, as I look back over the past eleven years, I think we have a breast screening program of which we can be proud.

Tim Terry, MD, FRCPC, FRCR (UK)
Chief Radiologist, *Screen Test*

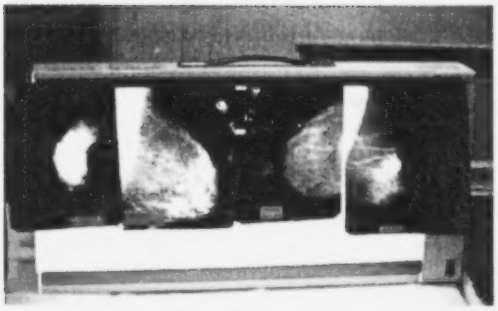
Introduction

There are 250,000 women aged 50-69 in Alberta who stand to benefit from screening mammography for the early detection of breast cancer.[1] Breast cancer is still the most commonly diagnosed cancer in women (excluding non-melanoma skin cancer) and the second leading cause of cancer deaths.[2] Statistics from the Alberta Cancer Registry determined 1,694 women were diagnosed with invasive breast cancer and 403 women died of the disease in 1999.

Background

1988: A National Workshop was convened to discuss breast cancer screening in Canada. The resulting recommendations were for organized breast cancer screening programs to be set up through provincially coordinated dedicated centres.[3]

1989: The Alberta government announced funding for a provincial screening program. A multidisciplinary Advisory Committee was formed to direct implementation and clearly define program goals and objectives. The Alberta Cancer Board (ACB) was mandated to administer the Program which was funded by Alberta Health.



1990: The Alberta Cancer Board's *Screen Test* Program opened its doors simultaneously in Calgary and Edmonton on October 1, 1990.

1991: The first mobile mammography van commenced operation in north-central Alberta.

1994: The Program became part of the Alberta Cancer Board's newly formed Division of Epidemiology, Prevention and Screening.

1996: Two more mobile vans were added, providing screening services to women in northern and southern Alberta.

2000: *Screen Test* celebrated 10 years of service to Alberta women by screening over 78,000 women in 163,000 appointments.

Mission and Activities

Screen Test's mission is to **reduce mortality from breast cancer in Alberta women.** The Program's activities are directed by the goals and objectives identified by its Advisory Committee.

The 1999/01 *Screen Test Biennial Report* provides an update on Program activities and progress for the benefit of the Alberta Cancer Board (ACB), Alberta Health and Wellness, Regional Health Authorities (RHAs) and health care professionals interested in breast cancer. Information is reported biennially as most women attend the Program every two years following the Canadian screening recommendations for screening mammography.[3]

Recommendations for Organized Breast Cancer Screening Programs

Recommendations from the 1988 National Workshop Report[3], *Screen Test's* 1990 Program startup goals and objectives, the 1993 National Forum on Breast Cancer[4] and the 1997 Quality Determinants of Organized Breast Cancer Screening Programs[5] help guide the Program's activities and provide benchmarks for evaluation. Specific recommendations regarding components of breast cancer screening programs in Canada fit well with the goals and objectives set by the Program. As new and relevant information becomes available, the Program attempts to adapt program measures to best practices.

Screen Test first opened its doors in 1990. Since then, the Program has screened over 78,000 women throughout Alberta.

Listed below are the program components recommended for organized breast cancer screening programs in Canada and a description of how the Program incorporates these into practices.

A population-based outcome goal

Screen Test's goal of *reducing breast cancer mortality by 30 percent in the target age group within 15 years of full implementation* continues to be a focus for the Program. Although the Program has not yet been fully implemented, the ACB has provided services to all RHAs in the province and is working with other organizations to move toward a province-wide screening program.

Information about the target population

Screen Test collects information about women aged 50-69 to use in planning and evaluation. Alberta Health and Wellness, Statistics Canada, Census and Program visits are the primary sources of data. Where sources do not exist or are not available, *Screen Test* has conducted random population-based surveys on breast cancer screening knowledge, attitudes and behaviours (KAB) to obtain the required information, especially from those women who access screening outside of the Program.

Special emphasis on hard to reach groups (including rural communities)

Screen Test continues to work towards its goal of *screening no less than 70% of any particular subgroup (rural, urban, ethnic origin, area of the province, etc.) within 5 years of full implementation.* Hard to reach groups are groups who are less likely to adopt a new health activity when it is first introduced. The reasons for this are varied and include geographic barriers, language barriers, cultural beliefs and practices, or fear. Many different interventions and collaborations with other groups are used by the Program to address recruitment of hard to reach groups, although success is limited by the lack of a fully implemented provincial program.

Meticulous quality assurance, including equipment and interpretation

Screen Test continues to maintain high quality control standards. The goal is that *100% of mammography units and such other program elements subject to quality control standards will meet defined standards.* Equipment cleaning and maintenance procedures adhere to international quality control standards and sites are accredited by the Canadian Association of Radiologists (CAR) and the Alberta College of Physicians and Surgeons. All *Screen Test* mammography units are fully

Screen Test's average glandular tissue dose is well below the suggested standard of 300 millirads.

accredited by CAR. In addition, education, training and performance indicators recommended in the Quality Determinants of Organized Breast Cancer Screening Programs[5] are met or surpassed by *Screen Test's* radiologists and technologists.

Outcome data and analysis

Screen Test has maintained a centralized database since the Program began, with full access to all data collected for analysis. As a result, *Screen Test* can produce analyses on outcome indicators and evaluate the overall goal of reducing breast cancer mortality. Collaboration with other screening programs through the National Database and Evaluation Indicators Working Groups has ensured that performance measures used by *Screen Test* are accurate, current and relevant for a screening program. This also allows for national comparisons of screening programs.

Information systems and linkages

A centralized database allows *Screen Test* to monitor and evaluate data to provide the best service possible to women throughout the province. The *Screen Test* application for collecting program data recently moved to a windows-based front end to improve the ease and speed of entry and look-up of information. Because of the existing Alberta Cancer Board information system and network, the Program was able to test and implement optical scanning of data forms directly into the database and application. Additional data could then be collected and processed without incurring additional costs or errors from manual data entry. A complementary film tracking system is currently under development.

A woman-centred focus

All screening sites reflect a woman-centred focus—one that healthy women see as approachable and comfortable. To achieve this, women are engaged as partners in their own breast health. Breast health information and resources are made available at clinic appointments. *Screen Test* volunteers help to create a welcoming and sensitive environment by assisting with clinic appointments, providing information at public space displays, community presentations and screening sites.

Excellent coordination, with high quality diagnosis and followup

Screen Test's clinical mandate is to provide excellent screening services and to actively collect results of diagnostic tests undertaken as a consequence of screening. The Program actively pursues data on women requiring diagnostic work-up until a final diagnosis is made, losing less than 2% in followup. This allows the Program to act as a failsafe for the diagnostic followup of women with abnormal screening results.

Summary

It is certain that the initial goals and objectives set by *Screen Test* contain the essential components recommended for organized breast screening programs. *Screen Test* meets and often exceeds the standards set in Canada (1988 Canadian Workshop Report[3], 1993 National Forum[4], 1997 Quality Determinants document[5]) and, as shown later in this report, meets or exceeds international standards on outcome indicators. In order to better meet the needs of women, *Screen Test* will be incorporating relevant and updated guidelines from national and international groups.[6, 7]

This report highlights the successes and achievements of *Screen Test* during the 99/01 fiscal year and the first 10 years of operation.

Program Outcomes

This section summarizes the information and data gathered by *Screen Test* on geographic reach of the target population, client profile and screening results between 1999 April and 2001 March.

Geographic Reach of the Target Population

An evaluation of age and geographic targets provides a measurement of *Screen Test's* goal to reach at least 80% of all Alberta women aged 50-69 years, with no less than 70% of any particular subgroup.

77% of the women who attended *Screen Test* were in the target age group of 50-69 years.

Age at Appointment

As shown in Figure 1, 77% of the women attending *Screen Test* were in the target age group. The mean age of women attending *Screen Test* was 59.3 years in 1999/01 (age of client at initial visit during 1999/01).

The data show an increase in the number of visits by women aged 40-49 compared to the 1997/99 fiscal years. This is because women in this age group are on an annual recall,[8] indicating that they may have had a mammogram twice within the two-year reporting period. Although women 40 years of age and over can attend *Screen Test*, the target group for screening is women aged 50-69 years, where screening mammography has been proven to decrease breast cancer mortality rates.[9-11]

Figure 1

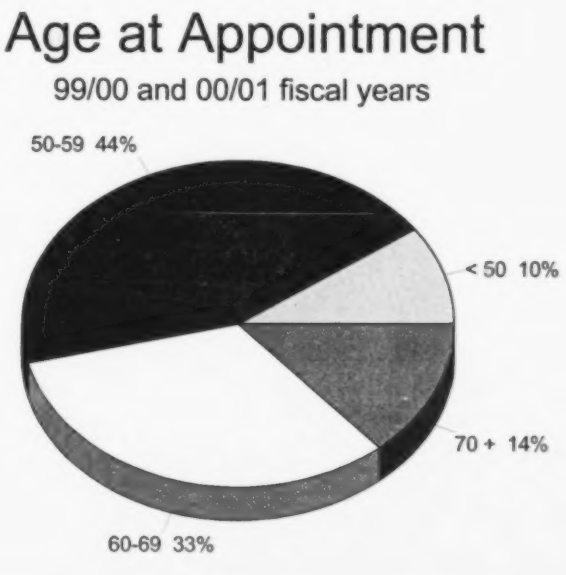


Table 1

Screen Test Visits, 1999 April - 2001 March	
Site	**Site Totals**
Calgary	11,182
Edmonton	10,916
Mobile 1 (serving north-central Alberta)	9,034
Mobile 2 (serving more distant regions in northern Alberta)	6,255
Mobile 3 (serving southern Alberta)	7,033
Total Visits	44,420

Screen Test Visits

Table 1 shows the total number of *Screen Test* appointments during the 1999/01 fiscal years by site. Screening services are provided at fixed sites in both Calgary and Edmonton, and through other sites served by three mobile units. The appointment totals vary among the three mobile mammography service areas due to different population distributions.

Compared to the 1997/99 fiscal years, there was a 4.5% increase in the number of visits. Mobile 3 includes nine women who were screened at the Hanna satellite site that was set up in 1997 through a partnership with Hanna in Health Authority 5. The numbers in Table 1 do not include an additional 195 women who were screened in the two Northwest Territories sites of Hay River and Fort Smith as part of a collaborative project.

Table 2 shows the number of women screened by RHA of residence. Sites added since the 1997/99 fiscal years were Fort Macleod, Nanton, Tsuu T'ina, O'Chiese, Sunchild, Beaumont and Tangent, which replaced the Eaglesham site. Some RHA visits by mobile units were completed between the end of one fiscal year and the start of another but are counted by complete fiscal year.

Screen Test, with its mobile vans, has provided screening services in all 17 RHAs.

Table 2

***Screen Test* Visits by RHA of Residence** *1999 April – 2001 March*		
Regional Health Authority	**Mobile Site Locations**	**RHA Totals**
1 – Chinook	Blairmore, Brocket, Cardston, Fort Macleod, Milk River, Pincher Creek, Standoff, Taber	1,211
2 – Palliser	Bassano, Bow Island, Brooks, Foremost, Oyen	1,544
3 – Headwaters	Banff, Canmore, Claresholm, High River, Morley, Nanton, Okotoks, Vulcan	2,363
4 – Calgary	Fixed Site, Multiple Mobile Inner City Sites, Tsuu T'ina	11,394
5 – Health Authority 5	Carstairs, Didsbury, Drumheller, Siksika, Strathmore, Three Hills	1,703
6 – David Thompson	Hobbema, O'Chiese, Sunchild	113
7 – East Central	Camrose, Coronation, Daysland, Killam, Kitscoty, Lloydminster, Provost, Stettler, Vermilion, Wainwright	2,979
8 – West View	Edson, Evansburg, Hinton, Jasper, Spruce Grove, Stony Plain	1,873
9 – Crossroads	Breton, Drayton Valley, Wetaskiwin	951
10 – Capital	Fixed Site, Multiple Mobile Inner City Sites, Beaumont, Leduc, Thorsby	11,619
11 – Aspen	Athabasca, Barrhead, Boyle, Fox Creek, Legal, Morinville, Onoway, Sangudo, Swan Hills, Westlock, Whitecourt	2,415
12 – Lakeland	Bonnyville, Cold Lake, Elk Point, Fort Saskatchewan, Lac La Biche, Lamont, Redwater, Saddle Lake Reserve, St. Paul, Smoky Lake, Vegreville	3,442
13 – Mistahia	Beaverlodge, Fairview, Grand Cache, Grimshaw, Horse Lake Band, Hythe, Silver Valley, Spirit River, Sturgeon Lake Band, Tangent, Valleyview, Worsley	1,470
14 – Peace	Manning, McLennan, Peace River	272
15 – Keeweetinok	High Prairie, Red Earth Creek, Slave Lake, Wabasca	657
16 – Northern Lights	Anzac, Chard, Conklin, Fort Chipewyan, Fort MacKay	70
17 – Northwestern	Fort Vermilion, High Level, La Crete	344
Total Visits		44,420

Relatively few women attend *Screen Test* sites outside the RHA in which they live because *Screen Test* is successful in working with each RHA to determine appropriate sites and plan community mobilization. Some women travel to Calgary and Edmonton to obtain screening when they are in town for other reasons and this affects about 9% in each site.

The map in Figure 2 shows the *Screen Test* sites in each RHA. By collaborating with RHAs, *Screen Test* has succeeded in establishing more than 100 mobile mammography sites throughout the province.

Figure 2

Screen Test Mobile Mammography Sites

2001 March

Regional Health Authorities

1. Chinook Regional Health Authority
2. Palliser Health Authority
3. Headwaters Health Authority
4. Calgary Regional Health Authority
5. Health Authority # 5
6. David Thompson Regional Health Authority
7. East Central Regional Health Authority
8. WestView Regional Health Authority
9. Crossroads Regional Health Authority
10. Capital Health Authority
11. Aspen Regional Health Authority
12. Lakeland Regional Health Authority
13. Mistahia Regional Health Authority
14. Peace Regional Health Authority
15. Keeweetinok Lakes Regional Health Authority
16. Northern Lights Regional Health Authority
17. Northwestern Regional Health Authority

Client Profile

An assessment of the traits and behaviours of *Screen Test's* clients aids in measuring the Program's success in reaching population outcome goals. This section summarizes the characteristics and current breast health practices in more detail for women attending *Screen Test* in the 1999/01 fiscal years.

Mammography is currently the best tool for the early detection of breast cancer. A complete breast health program for women aged 50-69 includes biennial screening mammography, annual clinical breast examination (CBE) and monthly breast self examination (BSE).

Regular Mammograms

Table 3 provides information on the self reported interval between mammograms. Most women had at least one mammogram in the past three years. Women living in cities (or attending fixed sites) were more likely than women living in rural areas to have had a mammogram in the past three years. There were slightly more rural women having their first mammogram than urban women. Since there are fewer mammography machines in the rural areas, this attests to *Screen Test's* success in bringing mammography out to the rural women rather than making them come into the cities for screening.

Table 3

Self Reported Last Mammogram, 1999 April – 2001 March

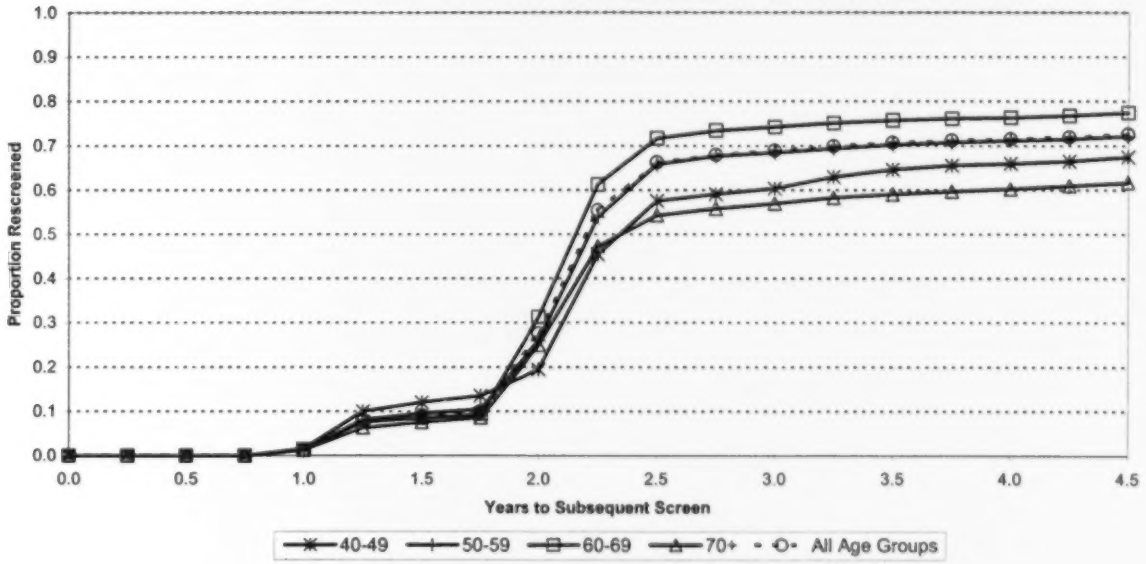
Site	Less than 3 years ago	More than 3 years ago	Never had one
	%	%	%
Calgary	87.1	5.4	7.5
Edmonton	88.2	5.0	6.8
Mobile 1	81.2	7.7	11.1
Mobile 2	82.1	7.7	10.2
Mobile 3	80.4	8.4	11.2
Overall Total	84.4	6.6	9.1

Retention

To maximize the benefits of screening mammography on a population basis, significant portions of women who have had a screening mammogram must return for repeat or regular mammograms at least once every two years. This return to screening, or retention, is an indication of how acceptable screening is to women.

Figure 3 shows that 66% of women who had a mammogram in 1997/99 and were due to return in 1999/01, returned within six months of their two-year screening due date.

Figure 3 **Cumulative Probability of Returning for Subsequent Screen Women Screened in 1997/99 Fiscal Years - by Age Group**

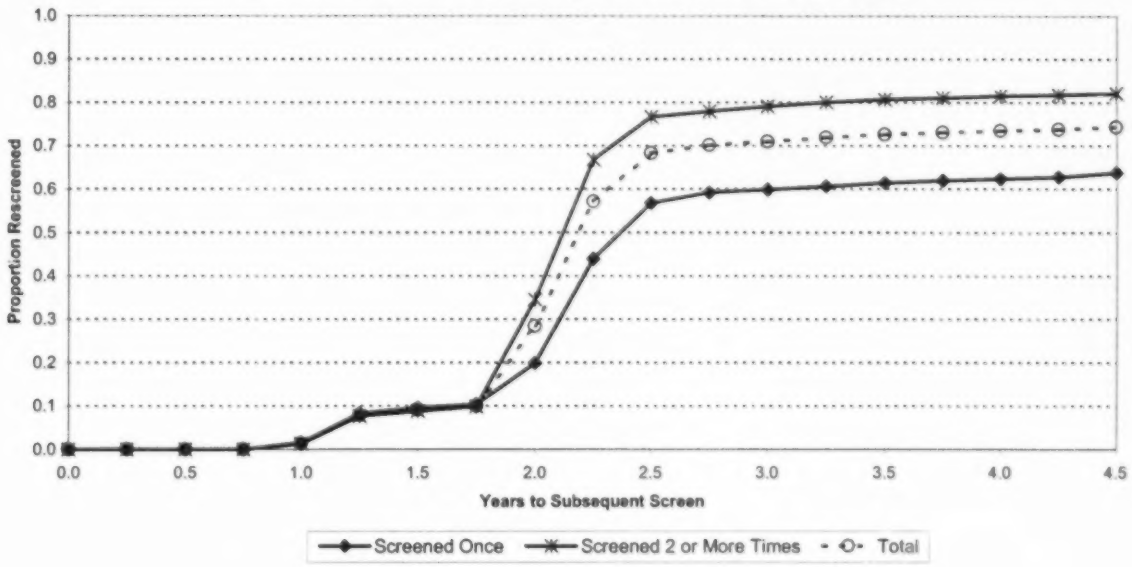


Women 40-49 and 70+ are welcome to participate in the Program if they have discussed it with their doctor, but they are not actively recruited into the Program. This is reflected in their lower probability of returning to screening. It is not known how many women have their repeat screens outside of the Program.

At first glance, it appears that women 60-69 have a higher probability of returning to screening than women 50-59, which seems contrary to the findings that older women are more difficult to recruit and retain than younger.[12] Figure 4 shows 68% of women 50-69 that had a screen in 1997/99 returned in 1999/01 within six months of a two-year recall date.

Nevertheless, at 2.5 years, there is a 20% difference in probability of returning for women who had a first return visit versus women who had two or more return visits by 1999/01. This is more pronounced for women 60-69, as fewer women are recruited into the Program at older ages for their first visit. However, of the women who started screening in their fifties, many are continuing to get screening mammograms in their sixties. Therefore, these findings do support the belief that older women are harder to recruit if they have not already been participating in screening.[13] Although there has been success in getting almost 77% of women who came two or more times to return within 2.5 years, more work is needed to improve the 57% coming back for their second visit.

Figure 4 Cumulative Probability of Returning for Subsequent Screen Women Aged 50-69 Screened in 1997/99 Fiscal Years



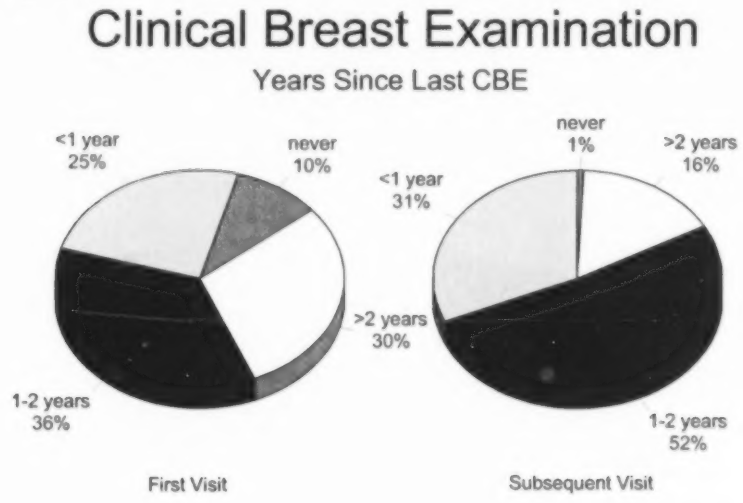
Annual CBE

It is generally accepted that mammography alone is not enough to detect 100% of breast cancers, so clinical breast exam is recommended.

The data on CBE practices of *Screen Test* clients is relatively stable and suggests that the Program has had a positive and continuing impact on promoting regular CBE. *Screen Test* clients are reminded to see their family physician for annual CBE, a message that is spread through videos, pamphlets, presentations and result letters to the woman and her physician.

As shown in Figure 5, the number of women who had a CBE in the past two years increased from 61% for first visits to 83% for subsequent visits. The number of women who have never had a CBE decreased from 10% for first visits to only 1% for subsequent visits.

Figure 5



Monthly BSE

Screen Test also prompts women to perform monthly BSE, a message that is promoted through a variety of means—videos viewed during their screening visit, an opportunity to practice on breast models in the waiting rooms, reminders and pamphlets in their result letters and through health presentations. It is also repeated in other health promotion materials such as step-by-step BSE booklets and BSE reminder stickers for calendars.

Figure 6 shows that after their first *Screen Test* visit, the percentage of women doing BSE increased by 12% overall. The percentage doing BSE at the appropriate frequency of 9-15 times per year increased by 5%.

Figure 6

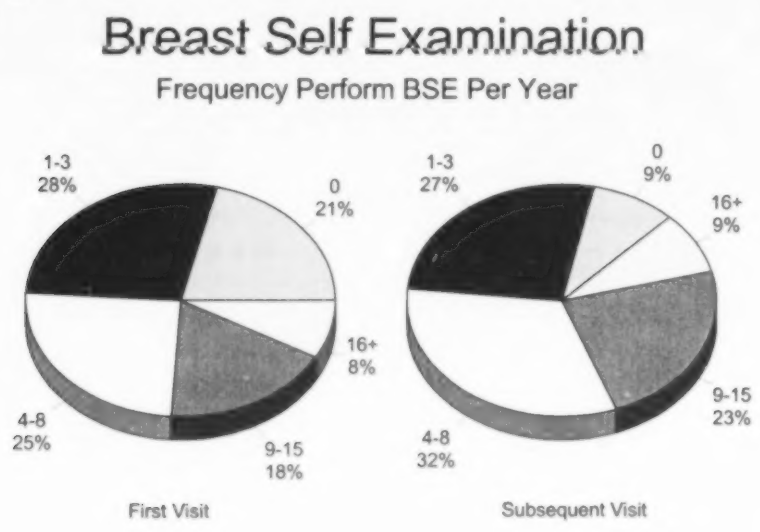
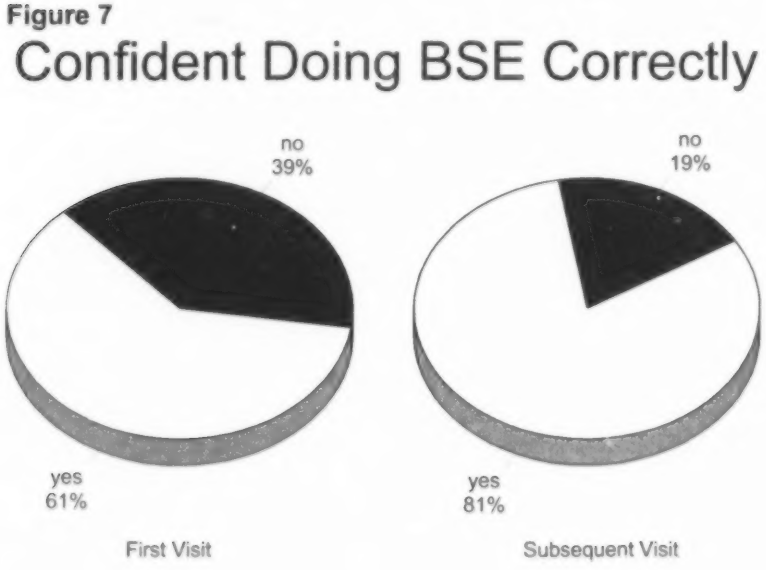


Figure 7 shows that 20% of women were more confident that they were doing BSE correctly on subsequent visits than they were on their first visit. The findings in Figures 6 and 7 suggest that *Screen Test* has had a positive impact on BSE, but the majority of women are not performing BSE at recommended frequencies. As evidence for the efficacy of BSE is reviewed, the Program will look to change its policies accordingly.[14]

Figure 7



Information Sources

When a woman books an appointment with *Screen Test*, she is asked what her most important source of information about the Program was. The data collected aids in assessing the effectiveness of various recruitment activities.

Figure 8 shows that the most important sources of information for women on their first visits were letters of invitation, printed media and doctor contact. Although letters of invitation bring in many new screeners, the overall impact of letters on appointments decreases over time as only women who have never contacted *Screen Test* receive letters of invitation. It is not known how many women receive a *Screen Test* letter of invitation and subsequently attend opportunistic screening.

The most important source of information for women on subsequent visits was the recall letter, which was changed to the recall postcard in 1999, as seen in Figure 9. These postcards are mailed 1-2 months before a woman's next appointment is due. Few women recall themselves without an intervention. The true success of recall notices to remind women of the need for continued screening cannot be fully measured because of the opportunistic screening available outside of the Program and the fact that the Program has not been fully implemented.

When the Program first started, recruitment of women who had never had a mammogram or had not had regular screening was emphasized.

Figure 8

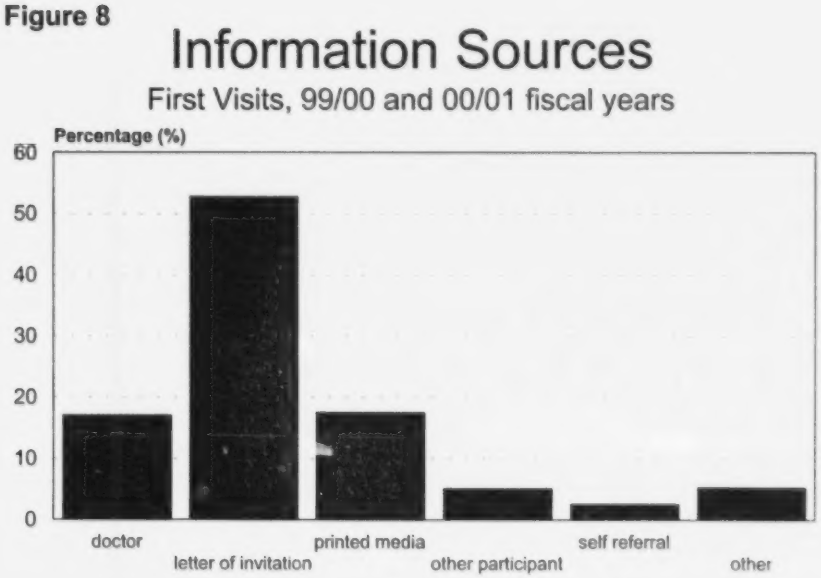
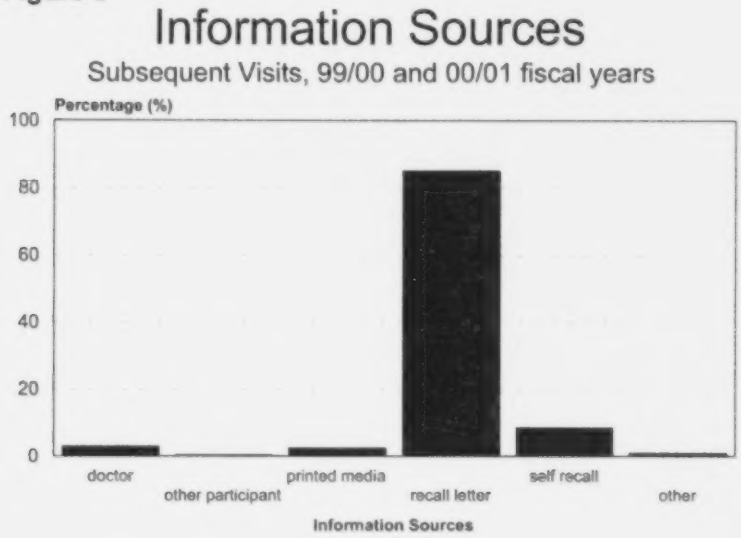


Figure 9



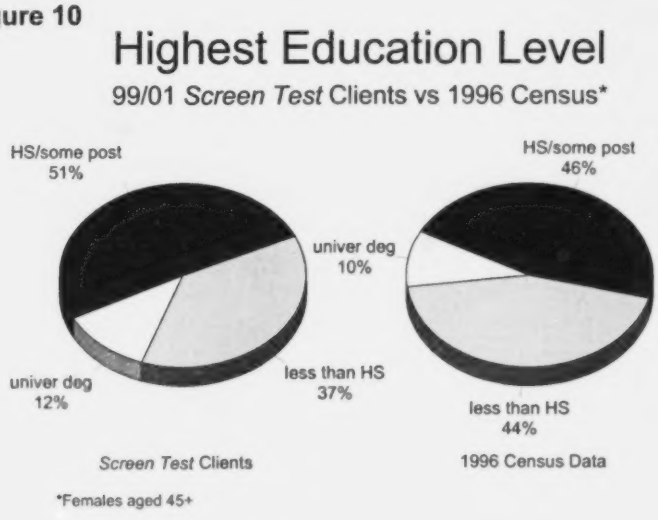
Now that the Program has been operating for over 10 years, the focus has moved to retention — getting women who have had at least one mammogram to come back for another one as part of regular screening.

Education Levels

Screen Test tracks education levels to compare women in the general population with women who attend the Program. This helps guide health education and recruitment and retention activities. Figure 10 shows the highest level of education obtained by *Screen Test* clients compared to 1996 census data (2001 census was unavailable at time of writing). *Screen Test* clients compare well with similarly aged population data. This indicates that *Screen Test* has been successful in recruiting/retaining women of different education levels at a similar distribution to the general population.

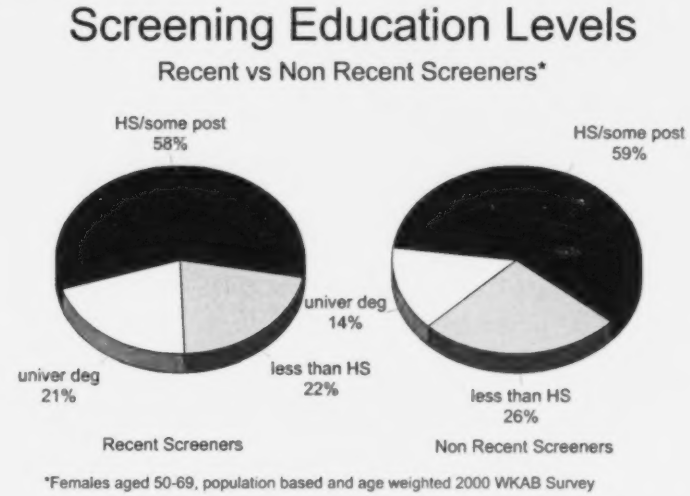
Although data from opportunistic screening facilities are not available, age and area weighted data from the 2000 Women's KAB (WKAB) random population-based survey on women 40-69 shows that screening outside of the program does not necessarily reflect the same education distribution as found at *Screen Test.* Figure 11 shows that women who were recent screeners (had a

Figure 10



mammogram in the last 24 months as a check-up) had a higher proportion with university degrees. A lower proportion of recent screeners had less than high school than women without a recent screen. While there is a trend for screeners to have higher education levels than non-screeners, the close approximation of education levels among *Screen Test* clients to census data reflects the success *Screen Test* has had in recruiting women from all education levels and not just the highly educated.

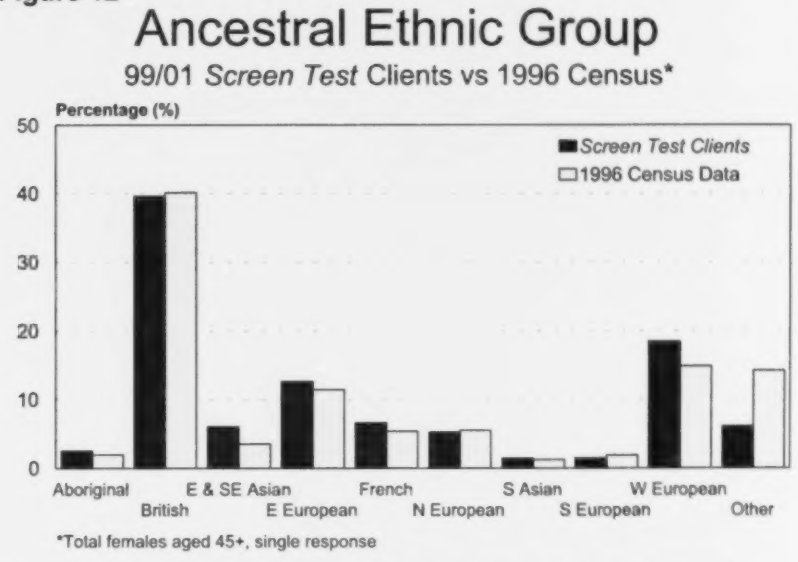
Figure 11



Ancestral Ethnic Background

Alberta is home to a diverse range of ancestral ethnic groups, particularly in Calgary and Edmonton. *Screen Test* tracks information on the ancestral ethnic origin of clients in order to assess how well the Program is meeting its goal of screening no less than 70% of any particular subgroup. Figure 12 shows how *Screen Test* meets or exceeds single response census data for most ethnic groups, suggesting that the Program is reaching many hard-to-reach groups. In particular, the success of collaborating with the Chinese, Vietnamese and Filipino communities has resulted in higher than census level East and Southeast Asian Program participation.

Figure 12



* "Other" includes African, American, Arab, Australian, Canadian, Caribbean, Latin, Central and South American, Pacific Islands and Western Asian.

Risk Factors

Early detection and identification of risk factors have been important in the fight against breast cancer because breast cancer cannot be prevented on a population basis. Major risk factors include age greater than 50, birthplace in North America or Europe and two or more family members with breast cancer. Each of these factors has an estimated relative risk of at least 4.0.[15]

Few women report age as a risk factor for breast cancer.

Most women attending *Screen Test* continue to be at high risk due to age and place of birth, as seen in Table 4. The percentage of *Screen Test* clients with a major risk of family history has not changed, and although most women are more likely to recognize a family history of breast cancer than age as risk factors, fewer women have two or more first degree relatives with breast cancer.[16]

Table 4

Major Breast Cancer Risk Factors, 1999 April – 2001 March

Factor	Response	%
Age greater than 50	Yes	90.2
Birthplace North America or Europe	Yes	89.5
Two or more family members with breast cancer	Yes	0.7

Table 5 outlines the percentage of women possessing other risk factors for breast cancer, the most common of which is menarche before age 12. The relative risks for age at first birth, nulliparity and menarche age range between 1.1 and 2.0. The relative risks for biopsies and one first degree relative with breast cancer range between 2.1 and 4.0.[15]

The individual risk profile of each client is included in the result letter sent to her physician, as is the frequency of BSE practice.

Although the identification of risk factors is important, other than age and birthplace, few women have additional risk factors, and few of these factors can be easily modified. Early detection remains the best tool for reducing mortality from breast cancer.

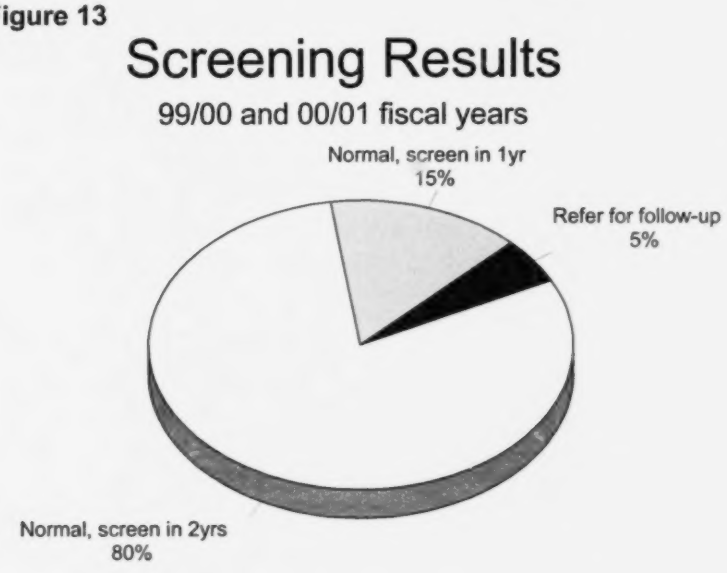
Table 5

Other Breast Cancer Risk Factors, 1999 April – 2001 March		
Factor	**Response**	**%**
Age at first birth greater than 35	Yes	1.6
More than two breast biopsies	Yes	3.8
Nulliparity	Yes	9.6
Menarche before age 12	Yes	17.7
One first degree relative with breast cancer	Yes	11.7

Screening Results

This section describes mammogram results and results of diagnostic tests undertaken as a consequence of *Screen Test* recommendations for further followup. Due to time lags necessary to complete diagnostic followup, 1% of data was still in followup at the time of writing and was not included in the diagnostic followup results.

Figure 13



About 5% of women screened are referred for further investigation.

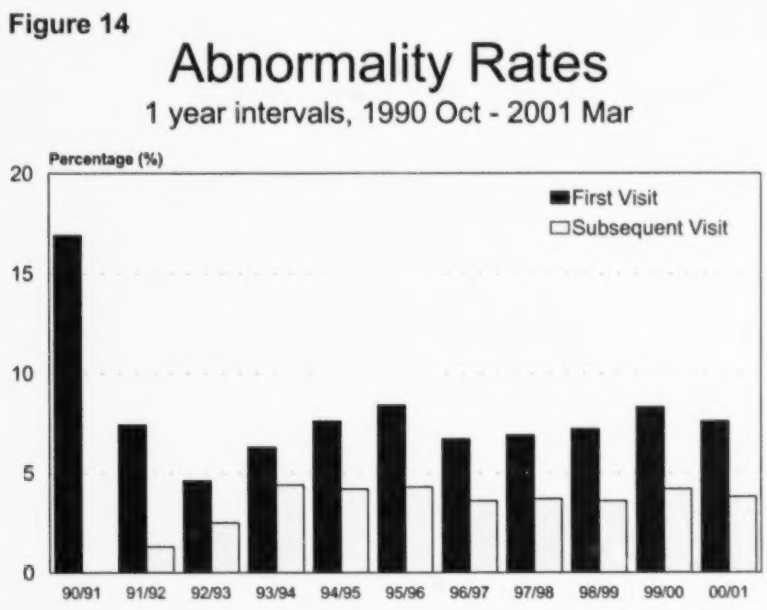
Further Investigation

About 95% of women attending *Screen Test* have no mammographic evidence of breast cancer and do not require further investigation. As shown in Figure 13, 80% were advised to return for screening in two years and 15% in one year. The recommended interval for a return visit varies because of age and radiologist recommendation. For example, women with very dense breasts or women with benign looking lesions may warrant an earlier comparison. There has been an increase in one-year recalls because women aged 40-49 are recalled on an annual basis as recommended by the Clinical Practice Guidelines.[8] Most women 50-69 return to the regular two-year screening interval after their subsequent mammograms are reviewed.

Abnormality Rates

For first visits, standards for Australia[17], United Kingdom[18] and Canadian screening programs[7] recommend abnormality rates be less than 10% and the European[6] standard recommends less than 7%. For subsequent visits, the recommended rates are less than 7%[18] and less than 5% respectively.[6, 7, 17] Over the last two years the *Screen Test* referral rate was approximately 8% for first visits and 4% for subsequent visits, both meeting national and international standards. *Screen Test* continues to have one of the lowest abnormal call rates among Canadian screening programs[19] largely due to the Program's stable and core group of radiologists.

Figure 14



First visits tend to have higher abnormality rates than subsequent visits because prevalent abnormalities would be found at the first visit. This pattern can be seen in Figure 14. It is not simply for economic reasons that it is important to limit the number of women referred for followup—it is also important that as few women as possible be alarmed by a false positive result that requires further investigation. This needs to be balanced against a concern that too low an abnormality rate could have a detrimental impact on cancer detection rates. Hence, abnormal call rates should be interpreted with cancer detection rates and positive predictive values as described further in this report.

Outcome Indicators

Outcome indicators by age group are shown in Tables 6 (1999 April to 2001 March) and 7 (1990 October to 1999 March). In late 1999, the Data Management Committee (DMC) of the Canadian Breast Cancer Screening Database recommended that the end of a screening episode be defined as:

1. diagnostic data by the first pathologic or cytologic diagnosis of cancer or
2. the last diagnostic test with benign findings or
3. the last investigation prior to a recommendation to refer to screening or return for early recall

Table 6

Outcome Indicators by Age Group, 1999 April – 2001 March					
Outcome Indicator	**Age at Exam**				
	<50	**50-59**	**60-69**	**70+**	**Total**
Number of exams, n	4,366	19,525	14,468	6,038	44,397
(%)	9.8%	44.0%	32.6%	13.6%	100%
Number of cancers, n	8	86	95	52	241
Abnormal call rate (%)	7.1%	5.5%	4.5%	4.6%	5.2%
Cancer detection rate per 1000					
prevalent	1.5	6.5	17.8	24.8	8.2
incident	2.1	4.0	5.7	6.9	4.9
total	1.8	4.4	6.6	8.6	5.4
Positive predictive value of screening mammography (%)	2.6%	8.0%	14.6%	18.8%	10.4%
Biopsy yield ratio (%)	20.0%	37.7%	62.2%	60.0%	45.5%
benign: malignant	4.00:1	1.65:1	0.61:1	0.67:1	1.20:1

The DMC recommendation has been put into effect by *Screen Test* as early closure of diagnostic followup by eight months or the second recommendation for repeat films in six months.

Table 7

Outcome Indicators by Age Group, 1990 October – 1999 March					
Outcome Indicator	**Age at Exam**				
	<50	**50-59**	**60-69**	**70+**	**Total**
Number of exams, n	5,047	61,834	52,154	11,348	130,383
(%)	3.9%	47.4%	40.0%	8.7%	100%
Number of cancers, n	23	242	330	120	715
Abnormal call rate (%)	8.5%	5.6%	4.9%	5.1%	5.4%
Cancer detection rate per 1000					
prevalent	4.2	5.1	9.7	20.8	7.6
incident	4.9	3.5	5.3	8.5	4.8
total	4.6	3.9	6.3	10.6	5.5
Positive predictive value of screening mammography (%)	5.3%	7.0%	12.9%	20.8%	10.2%
Biopsy yield ratio (%)	26.3%	25.9%	41.8%	61.4%	36.1%
benign: malignant	2.80:1	2.85:1	1.39:1	0.63:1	1.77:1

The earlier closure of diagnostic followup does not preclude the family physician from recommending or following further followup that is not tracked by the Program for benign breast disease. Nevertheless, this means that *Screen Test* can report on 99% of diagnostic results undertaken because of abnormal screening results from the 1999/01 fiscal years.

Table 6 shows that 241 breast cancers were detected among 44,397 women. Cancer detection rates are generally higher for prevalent screens (never had one or greater than three years since last screening) at 8.2 per 1000 rather than incident screens (had one less than three years ago) at 4.9 per 1000. *Screen Test* is able to meet and exceed international standards of 5 per 1000 for initial screens and 2 per 1000 for incident screens.[17, 18]

The combination of low abnormality rates and high cancer detection rates enables *Screen Test* to have high positive predictive values. This means that the Program is doing well at identifying women with

Table 8

Prognostic Features by Age Group, 1999 April – 2001 March

Feature	Age Group				
	<50	50-59	60-69	70+	Total
Total number of cancers	8	86	95	52	241
Histologic Type					
in-situ	3 (37.5%)	13 (15.1%)	19 (20.0%)	7 (13.5%)	42 (17.4%)
invasive	5 (62.5%)	73 (84.9%)	76 (80.0%)	45 (86.5%)	199 (82.6%)
Invasive Tumour Size (cm)					
≤ 1.0	1 (20.0%)	24 (33.3%)	25 (33.3%)	15 (34.1%)	65 (33.2%)
1.1 – 2.0	2 (40.0%)	37 (51.4%)	37 (49.3%)	18 (40.9%)	94 (48.0%)
2.1+	2 (40.0%)	11 (15.3%)	13 (17.3%)	11 (25.0%)	37 (18.9%)
Unknown		(1)	(1)	(1)	(3)
Median tumour size	2.0	1.4	1.3	1.5	1.4
Axillary Node Involvement					
None removed		4 (5.5%)	3 (3.9%)	8 (17.8%)	15 (7.5%)
Negative	3 (60.0%)	48 (65.8%)	54 (71.1%)	27 (60.0%)	132 (66.3%)
Positive	2 (40.0%)	21 (28.8%)	19 (25.0%)	10 (22.2%)	52 (26.1%)
TNM Stage Grouping					
I	3 (60.0%)	47 (65.3%)	52 (69.3%)	28 (63.6%)	130 (66.3%)
II	2 (40.0%)	23 (31.9%)	21 (28.0%)	16 (36.4%)	62 (31.6%)
III		2 (2.8%)	1 (1.3%)		3 (1.5%)
IV			1 (1.3%)		1 (0.5%)
X		(1)	(1)	(1)	(3)

Table 9

Prognostic Features by Age Group, 1990 October – 1999 March

Feature	Age Group				
	<50	50-59	60-69	70+	Total
Total number of cancers	23	242	330	120	715
Histologic Type					
in-situ	5 (21.7%)	57 (23.6%)	50 (15.2%)	20 (16.7%)	132 (18.5%)
invasive	18 (78.3%)	185 (76.4%)	280 (84.8%)	100 (83.3%)	583 (81.5%)
Invasive Tumour Size (cm)					
≤ 1.0	4 (22.2%)	53 (28.6%)	91 (32.5%)	39 (39.0%)	187 (32.1%)
1.1 – 2.0	8 (44.4%)	66 (35.7%)	123 (43.9%)	45 (45.0%)	242 (41.5%)
2.1+	6 (33.3%)	66 (35.7%)	66 (23.6%)	16 (16.0%)	154 (26.4%)
Median tumour size	1.5	1.5	1.5	1.3	1.5
Axillary Node Involvement					
None removed		30 (16.2%)	37 (13.2%)	26 (26.0%)	93 (16.0%)
Negative	11 (61.1%)	105 (56.8%)	188 (67.1%)	60 (60.0%)	364 (62.4%)
Positive	7 (38.9%)	50 (27.0%)	55 (19.6%)	14 (14.0%)	126 (21.6%)
TNM Stage Grouping					
I	9 (50.0%)	93 (50.3%)	181 (64.6%)	73 (73.0%)	356 (61.1%)
II	8 (44.4%)	82 (44.3%)	92 (32.9%)	27 (27.0%)	209 (35.8%)
III	1 (5.6%)	5 (2.7%)	3 (1.1%)		9 (1.5%)
IV		5 (2.7%)	4 (1.4%)		9 (1.5%)

mammographic abnormalities that indicate breast cancer. The low benign to malignant ratio shows that the Program recommendations for further followup have not subjected women to excessive unnecessary invasive procedures, like open biopsies.

Similar findings over the past 10 years are indicated in Table 7. *Screen Test* meets and exceeds standards on cancer detection rates and benign to malignant open biopsy ratios.[17, 18]

Prognostic Features

Prognostic features for 1999/01 are shown in Table 8. Less than 20% of cancers detected were in-situ, and the median invasive tumour size was 1.4 cm. International standards are that 25% should be 1.0 cm or less.[6] *Screen Test* meets or exceeds this with 33% being 1.0 cm or less. Excluding cases where nodes were not sampled, 72% of cases were node negative, meeting the standard that 70% or greater not have lymph node invasion.[20] For screening to be effective, the cancers

detected should be small and early stage. *Screen Test* data show that there appears to be a slight trend in finding earlier stage cancers.

Table 9 shows how prognostic features over the past 10 years are stable and relatively unchanged compared to the past two years in Table 8. There appears to be a positive increase in earlier Stage I and a slight decrease in later Stage IV cancers.

Diagnostic Followup

A total of 7,252 diagnostic procedures were performed on 2,309 women to obtain a final diagnosis after a screening abnormality. Women were referred back to their family physician for a physical exam. The most common additional diagnostic tests were physical exam, standard and further views and ultrasound. The median number of procedures that were performed was 2 (mean = 2.5).

Table 10

Diagnostic Procedures
1999 April – 2001 March

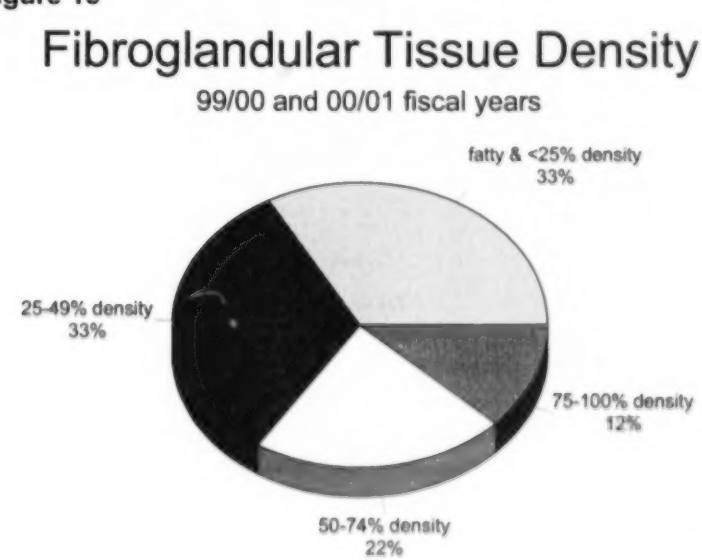
Diagnostic Procedure	%
Core biopsy	6.2
Fine needle or fluid aspirate	2.5
Needle localization biopsy	1.4
Open biopsy	0.7
Other or surgical consultation	5.9
Physical exam	28.6
Standard or special views	31.2
Ultrasound	23.6
Total	100.00

Fibroglandular Tissue Density

Figure 15 shows the distribution of breast fibroglandular tissue density. Mammography sensitivity for detecting abnormalities decreases with

Mammographic sensitivity decreases with increasing fibroglandular tissue density.

Figure 15



increasing breast density. As women age, breast density tends to decrease, although it can be increased by hormone replacement therapy. Women with very dense breasts are recommended to return for screening in one year rather than two. About 12% of women screened had 75-100% density of their breasts.

Result Letter

All clients and their physicians receive a mammogram result letter after a screening appointment. It is a priority for *Screen Test* to send women their result letters in a timely manner, i.e., to send 95% of letters within two weeks. As shown in Table 11, 94.3% of women attending were sent a result letter within 15 days of their mammogram appointment.

Table 11

Days Until Client Letter Sent
1999 April - 2001 March

	%
1 - 5 days	29.9
6 - 10 days	58.9
11 – 15 days	5.5
16 or more days	5.7
Total	100.0

The increase in time to send client letters may be related to the waiting time for outside films for comparison. While it has been standard practice to compare current with previous *Screen Test* films, the number of outside films for comparison being requested has increased over the years. It has recently become policy to request films from the past five years for all new clients.

In the case of abnormal results where the woman is referred for further investigation, the physician's result letter is sent before the woman's result letter to ensure the physician is prepared to answer the woman's questions and arrange followup. If a diagnostic appointment has not been made within two to three weeks after their result letter was sent, the physician's office is called. After two months, requests for results from the diagnostic workup are made and then tracked until a final outcome is determined.

Summary

To summarize program outcomes, *Screen Test* outcomes meet or surpass international standards. Much of this success can be attributed to the centralized core group of radiologists who read mammograms for the Program, the Program coordinators who ensure that diagnostic followup is completed, and the information system that tracks all relevant data.

Community Mobilization

The reporting period of 1999 April to 2001 March saw a tremendous range of accomplishments in community mobilization.

Urban Community Mobilization

In Calgary and Edmonton, many education activities and mobilization initiatives took place. The highlights are outlined below:

Volunteers

- Trained new volunteers and provided ongoing support to community, reception, office and education volunteers. Volunteers contributed several thousand hours to *Screen Test*.

Inreach

- Gave presentations to many groups, including: work sites, churches, community organizations, immigration and settlement centres, multicultural organizations, women's groups, senior's groups, nursing programs and other health care professional training programs.
- Set up public awareness displays at many locations, including: public health centres and hospitals, malls and individual businesses, community organizations, urban and rural community fairs, employee and occupational conferences, women's and senior's health conferences, flu clinics, schools and universities, multicultural events and trade shows.
- Conducted a successful one-year recall visit from Airdrie and outlying communities in which 65 women were provided free transportation to the Calgary *Screen Test* site.
- Arranged block appointment bookings and passenger van transportation to Edmonton for screening for groups of seniors and low income housing residents.

Collaborations/Partnerships

- Continued the Peer Health Educator project, including a special project with the Arabic speaking community. Recruited and trained more peer health educators.
- Worked with Community Nursing Students from the university to do a breast health needs assessment of three new communities.
- Participated in Partners in Breast Health and Women in the Workplace projects.

New Initiatives

- Developed a home breast health party concept, where women are invited to someone's home for a breast health/social gathering.
- Provided a series of displays at the Canadian Breast Cancer Foundation *Handle With Care* play held in several churches.
- Launched the first ever Continuing Care Outreach Project to a very enthusiastic reception.

Rural Community Mobilization

Screen Test collaborates with Regional Health Authorities to provide mobile screening services to women in smaller centres and rural communities. Rural community mobilization coordinators are trained and given *Screen Test* resources, such as *Bringing Breast Screening to Your Community: A Guide for Community Mobilization Coordinators,* to help promote *Screen Test* and mammography services. They also give presentations to women's groups, provide resources such as pamphlets and posters to local physician's offices, recruit and train volunteers to help with the screening appointments, and prepare a summary report at the completion of screening services in their region.

Research

As part of the Program's mandate on research, *Screen Test* participates and collaborates with others in breast cancer screening research projects. Research initiatives of the 1999/01 fiscal years are described below.

Women's Knowledge, Attitude and Behaviours (2000) (WKAB 2000)

KAB surveys were conducted in 1991, 1993 and 1995 on breast cancer screening. The 2000 telephone survey interviewed 2008 Alberta women aged 40-69 on their knowledge, attitudes and behaviours towards breast, cervical and colorectal cancer screening using a telephone-administered questionnaire. Results will be compared to assess the trends and to aid in planning Program activities.

Retention Survey 2000/2001

As part of the Program's retention strategy, a questionnaire was sent to 906 *Screen Test* clients on the reasons for returning or not returning for subsequent mammograms, and to determine factors affecting retention. *Screen Test* will pilot an intervention based on survey results in an effort to increase retention.

Digital Mammography

In a project with the University of Calgary, *Screen Test* mammograms are being digitized to help evaluate the screening and diagnostic accuracy of the computer-aided mammography system. This involves the development of computer techniques to improve the quality of mammograms and enhance the visibility of diagnostic features.

Delay to Diagnosis of Breast Cancer

Screen Test collaborated on national research that analyzed data from five Canadian breast screening programs to evaluate the influence of delay to diagnosis on prognostic indicators of screen-detected breast cancer. It was found that delays to diagnosis following an abnormal mammogram are associated with increased tumour size and nodal involvement.

Breast Cancer Screening Intervals

Screen Test collaborated on national research that determined factors affecting trends in annual screening rates when recommendations are for biennial screening. It was found that family history of breast cancer, physician recommendation for annual screening and increased self-referrals for annual screening are all factors influencing the trend of increased annual screening rates.

1990 to 2000: Celebrating 10 Years

In 2000, *Screen Test* celebrated 10 years of service for Alberta women. The anniversary celebrations were kicked off with gala events in Calgary and Edmonton with special guest The Honourable Lois E. Hole, Lieutenant Governor of Alberta. Open houses were held at the fixed sites, attracting health care professionals, community members, clients and the general public.

A special project initiated during the anniversary year was the Ribbon of Hope—a chain of ribbons, each signed by women throughout Alberta in honour of women they care about and want to see healthy. The Ribbon of Hope now totals 6,675 feet (2,034 metres) long and has over 24,000 signatures. It has been highlighted in the media on many occasions and was submitted to the Guinness Book of World Records.

Other celebration activities included monthly prize draws for women coming for mammograms and a poster presentation for the Alberta Public Health Association conference that highlighted anniversary events and the use of celebration as a health promotion vehicle. An awareness campaign for the anniversary year included radio public service announcements read by singer Jann Arden, banners on bridges and the creation of an anniversary pin.

Program milestones for the Program's first 10 years are:

- Over 78,000 women attended more than 163,000 screening appointments.
- Almost 1,000 breast cancers were detected.
- Service was provided in all 17 RHAs.
- Screening increased from 7,776 appointments in the first fiscal year to 22,284 in the tenth fiscal year.

Summary and Future Directions

This report highlights the outcomes and activities of the fiscal years 1999 to 2001 for *Screen Test: Alberta Program for the Early Detection of Breast Cancer.* The Program continues to provide high quality cost-effective screening for the women of Alberta. *Screen Test* meets or exceeds international standards and outcomes as well as Canadian recommendations for performance of breast screening.

In addition to providing the best service and failsafe possible within the current environment for the women of Alberta, we hope to continue working with others to build and coordinate a truly provincial breast cancer screening program. Plans for the future include: earlier closure of diagnostic followup, improved film tracking, expedited referrals for abnormal screening workup, cancer staging done by cancer registry and a de-emphasis of BSE. *Screen Test* intends to revisit recall postcards and retention strategies and collaborate with the Alberta Cervical Cancer Screening Program. We look forward to a positive future in reducing breast cancer deaths.

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Appendix A: Glossary of Terms

Abnormality Rate

Proportion of screening mammogram examinations determined to require further diagnostic assessment (e.g. called "abnormal" or "needing further review").

$$\text{Abnormal call rate} = \frac{\textit{number of exams called abnormal}}{\textit{total number of exams performed}}$$

Biopsy Yield Ratio

Proportion of cases biopsied that resulted in a diagnosis of breast cancer. Excludes core biopsy.

$$\text{Biopsy Yield Ratio} = \frac{M_b}{B_b + M_b}$$

B*b* - number of cases with benign diagnosis on screen-initiated biopsy
M*b* - number of women found to have breast cancer on screen-initiated biopsy

Biopsy Yield Ratio, which is sometimes referred to as **Positive Predictive Value of Biopsy**, can also be expressed as **Benign:Malignant Ratio.**

$$\text{Benign : Malignant Ratio} \Rightarrow \frac{B_b}{M_b} \quad : 1$$

Cancer Detection Rate

Proportion of screened cases found to have breast cancer upon further investigation of an "abnormal" screening result.

Prevalent Cancer Detection Rate is the cancer detection rate on the first screening examination or self-reported last mammogram ≥ 3 years ago.

Incident Cancer Detection Rate is the cancer detection rate on the return screening examination or self-reported last mammogram < 3 years ago.

Cancers

Refers to screen-detected breast cancers.

Exams

Unless otherwise stated, refers to a valid mammogram appointment with *Screen Test* during the 1999/01 fiscal years.

Incident mammogram

Refers to the last self-reported mammogram being < 3 years ago. This is not necessarily the first screening with *Screen Test*.

Positive predictive value (PPV)

Proportion of abnormal cases found to have a breast cancer after diagnostic work-up.

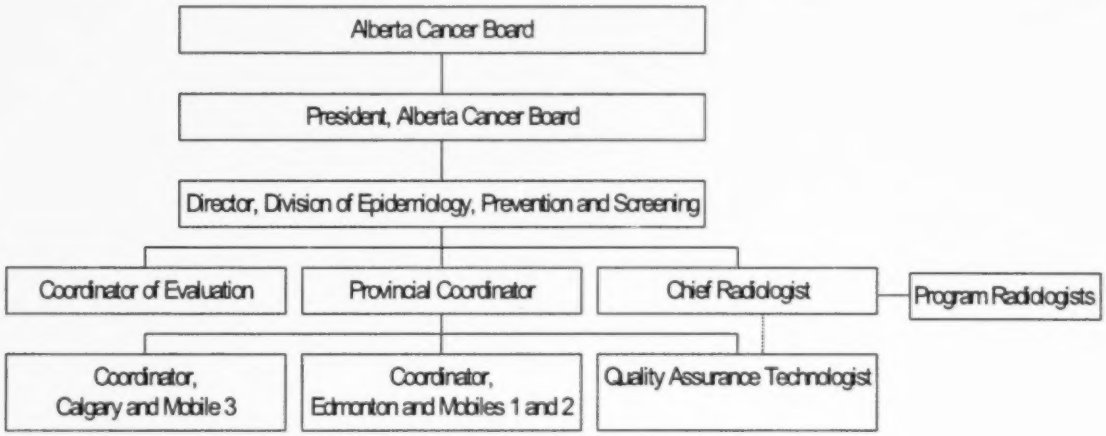
$$\text{PPV} = \frac{\textit{number of screen detected cancers}}{\textit{number of abnormals}}$$

Prevalent mammogram

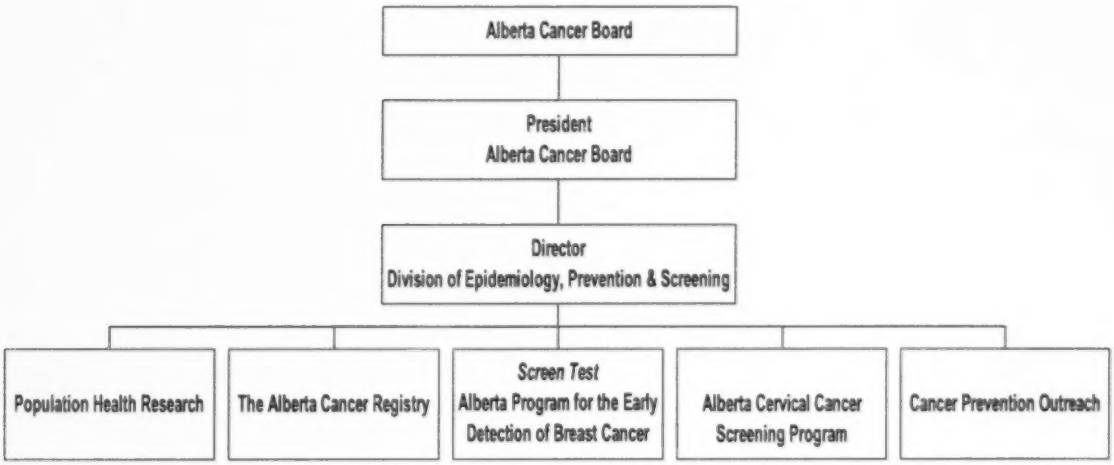
Refers to the last self-reported mammogram being ≥ 3 years ago or having never had one. This is not necessarily referring to an initial mammogram with *Screen Test*.

Appendix B: Organizational Charts

***Screen Test*: Alberta Program for the Early Detection of Breast Cancer**



Division of Epidemiology, Prevention and Screening



Appendix C: *Screen Test* Resources

These resources are available without charge from *Screen Test.*

Pamphlets/Booklets

Breast Cancer Screening For Alberta Women

This pamphlet is designed to inform women of the *Screen Test* Program, its eligibility requirements and self referral information.

After Your Screening Mammogram

This pamphlet is given to women after they have had their mammogram at *Screen Test.* It tells women when and how they will get the results of their mammogram and what it means if the results are abnormal.

Caring For Your Breasts (written at low literacy levels)

This booklet, written at low literacy levels, provides women with the three elements of a breast health plan: 1. Breast Self Examination, 2. Clinical Breast Exam and 3. Mammography

What You Should Know if You Have an Abnormal Result

This pamphlet is sent with the client's result letter if her mammogram result was abnormal. It answers questions about what an abnormal result means and what to do next. It also contains a tear-out checklist for women to keep in their wallet for quick reference.

Fact Sheets

Breast Cancer in Alberta

This fact sheet is designed to give women a summary of breast cancer facts and statistics.

Why Should My Organization Become Involved With *Screen Test*?

This sheet explains why an organization should be involved with *Screen Test* and suggestions on how the organization can encourage their members to participate in *Screen Test* programming.

Posters

Is it time for your Mammogram?

This poster is designed to inform women of the *Screen Test* Program and can be placed in physician's offices, examining rooms, health offices, hospitals, etc. A slightly larger version is available for mobile sites with space to include the announcement of the mobile visit to the community. This is also available in languages other than English.

Caring for Your Breasts is Important for All Women

This poster informs women about the *Screen Test* Program and provides space to post upcoming events in the community.

Physician Resources

Chart stickers are available to be placed on files of age eligible women for breast cancer screening. A two-sided fact sheet sumarizing breast cancer facts and statistics is also available.

Other Items

Screen Test Information Card

This business card-sized information card is designed to be used by women to determine if they are eligible for *Screen Test* services and provides the information needed to make an appointment. Physicians can give eligible women these cards to reinforce their recommendation that she call *Screen Test* for an appointment.

Breast Health Record

This card explains the elements of a breast health plan with a description and graphics of the BSE method taught by *Screen Test*. This is also available in languages other than English.

Breast Health Wheels

This interactive resource was developed to give age-specific breast health information to women. It also includes information on breast self-examination.

Breast Self Examination Reminder Stickers

A set of 12 or 15 stickers are available for women to use on their calendars as a reminder to do BSE.

Breast Lump and Breast Model Displays

The breast lump display provides a visual reference about the sizes of breast lumps and the stages these lumps are generally found. The breast model display has breast models with lumps and allow women to practice BSE techniques with instruction. These resources are for loan only.

Video

Screen Test - Your Peace of Mind

This 10 minute video was developed to help women become familiar with mammography and the *Screen Test* program. This video is for loan only and is available in languages other than English.